Airbnb Listings Analysis

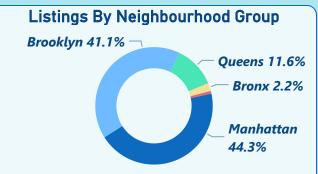
Total Listings 48.72K

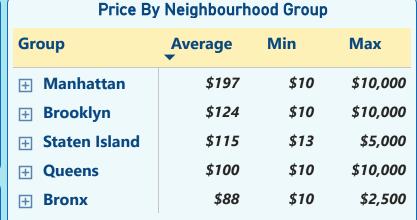
Total Hosts 37.35K

Total Reviews

1M

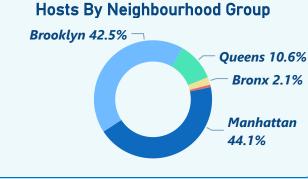


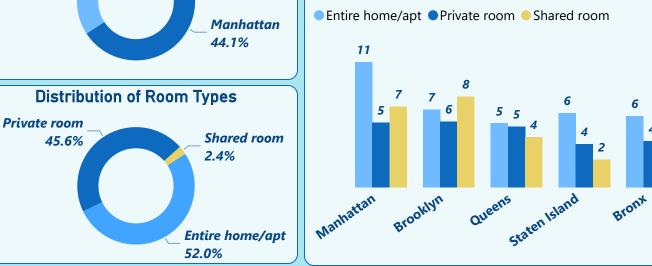




Average Night Spent











Objective

The objective of this project is to create a power bi dashboard by utilizing the Airbnb New York 2019 dataset and finding key insights by analyzing these listings. Insights from this dashboard would be beneficial in understanding Airbnb business in New York and can be also utilized in taking strategic and business decisions. By visualizing data in charts and tables, the dashboard aims to improve pricing strategies, enhance guest experiences, and ultimately boost revenue for Airbnb hosts in New York City.

Project Summary

The Airbnb power bi dashboard consists charts like bar charts and pie charts, tables, KPIs (key performance indicator) and different slicers to monitor Airbnb listing activity during 2019. The dashboard is capable of providing valuable insights about distribution of listings, room types and hosts ,variation of price in the neighbourhood areas and availability of listings. Additionally, the data can be filtered by room types, neighborhood groups, price range, and monthly reviews to ensure no information is missed.Initially, the data was cleaned using Power Query Editor, which involved handling missing values, correcting data types, and removing duplicate entries.

About Dataset

- Since 2008, guests and hosts have used Airbnb to expand on traveling possibilities and present more unique, personalized way of experiencing the world. This dataset contains the information about Neigbourhood areas, Hosts, Listing details, pricing in different areas of New York, geographical details and availability of listings during 2019.
- •This dataset contains around 49,000 observations with 16 features, including both numerical and categorical variables.

Variable Description

- id: A unique identifier for the listing
- ·name: Name of the listing
- ·host_id: A unique identifier for the host
- .host_name: Name of the host
- neighborhood_group: The main region of the city where the listing is located
- ·neighborhood: The specific neighborhood where the listing is located
- ·latitude: latitude coordinate of the listing
- ·longitude: longitude coordinate of the listing
- ·room_type: The type of room offered by the listing
- ·price: Nightly rental price
- ·minimum_nights: Minimum number of nights required to book the listing
- number_of_reviews: Total number of reviews left by guests
- ·last review: Date of the last review
- ·reviews_per_month: Average number of reviews received per month
- ·calculated_host_listings_count: Number of properties owned by the host on Airbnb
- ·availability_365: Number of days per year that the listing is available for booking

Insights

- •The dashboard reveals that popular neighborhoods like Manhattan and Brooklyn have the highest occupancy rates, while other boroughs like Staten Island have significantly lower rates.
- ·Because of popularity, Manhattan and Brooklyn have a higher average listing price than other neighbourhood groups.
- Manhattan is the most expensive neighbourhood for all kinds of room types and The Bronx has the lowest price ranges among the neighbourhood groups.
- •Approx. 49 per. entire homes are located in Manhattan, around 40 per. are in Brooklyn and rest 11 per. are in other neighbourhood group.
- •Manhattan has approximately 13000 Entire homes/apt, which is more than any other neighbourhood group and Brooklyn has the maximum number of private rooms, which is around 10,000.
- •Entire apartments and private rooms are more preferred room categories in New York, and hence the prices are on the higher side for these categories.

Insights

- In comparison to other room types, almost all neighbourhood groups have a very limited number of shared rooms.
- · Average availability of rooms is less in Manhattan and Brooklyn.
- · Average availability for entire homes and private rooms is highest in Brooklyn, which is 97 days and 100 days, respectively.
- For shared rooms, the average availability is highest in Queens (191 days) and lowest in Staten Island (65 days).
- · Michael, David, John, Jason and Alex are top five most reviewed hosts in New York.
- · Majority of hosts are located in Manhattan and Brooklyn.
- •Forth wardsworth, Wooddrow, Tribeca, Sea Gate and Riverdale are top five most expensive neighbourhood group.
- · Average nights spent are highest in Manhattan and Brooklyn.